

## A New Variety of *Schoenoplectus mucronatus* (L.) Palla (Cyperaceae) from Japan

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A new variety of *Schoenoplectus mucronatus* (L.) Palla, var. *antrorsispinulosus*, is described from Okayama Prefecture, southwestern Japan. This variety is characteristic in having antrorsely spinulose hypogynous bristles while other infraspecific taxa of the species have retrorsely spinulose ones.

**Key words:** Cyperaceae, hypogynous bristles, new variety, *Schoenoplectus mucronatus* var. *antrorsispinulosus*.

*Schoenoplectus mucronatus* (L.) Palla is distributed widely in Eurasian continent, but rarely in Japan (Kadono 1994). It is found on the margins of Showa-ike pond in Okayama, southwestern Japan (Kobatake et al. 1999). We examined specimens from the habitat and found that the hypogynous bristles of the plant are antrorsely spinulose (Fig. 1a, b). The feature is stable in the population of the habitat and entirely different from that of the rest of the species which is retrorsely spinulose (DeFilipps 1980, Egorova 1999, Koyama 1978: Fig. 1c, d). Hypogynous bristles are smooth, scabrid or plumose in the genus *Schoenoplectus* (Goetghebeur 1998). Spinules on the scabrid hypogynous bristles are mostly retrorse in the genus except for a few species, in which the bristles are retrorsely to antrorsely spinulose (Smith and Hayasaka 2001). In a recent taxonomical work on the genus (Smith and Hayasaka 2002), hypogynous bristle differences, such as density and length of spinules, are considered to have an enough value for dividing taxa as varieties. We, therefore, regard this

plant as a different variety of *S. mucronatus*, and name it var. *antrorsispinulosus* after the feature of hypogynous bristles. This variety grows on the wet sandy place along the stream at the margin of the Showa-ike pond with *Sanguisorba officinalis* L., *Ilex serrata* Thunb., *Eupatorium lindleyanum* DC., *Misanthus sinensis* Andersson, *Ischaemum aristatum* L. subsp. *glaucum* (Honda) T.Koyama, *Cyperus pilosus* Vahl, *Rhynchospora rugosa* (Vahl) Gale and *Scirpus wichurae* Boeck. Although we examined herbarium specimens of the genus in KPM, KYO, MAK, TI, TNS and TUS, no other locality of the variety has been found so far. Further field surveys especially around the type locality are needed to clarify the biogeographical extent of the variety.

*Schoenoplectus mucronatus* (L.) Palla in Bot. Jahrb. **10**: 299 (1888).

var. *antrorsispinulosus* Iokawa, K.Kohno & Daigobo, var. nov. [Fig. 1e, f]

A typo setis hypogynis antrorse spinulosis differt.



Fig. 1. Fruits with hypogynous bristles (a, c: dorsal view) and spinules on hypogynous bristles (b, d) of two varieties of *Schoenoplectus mucronatus*, var. *antrorsispinulosus* (a, b) and var. *mucronatus* (c, d), habit (e: 23 Sept. 2002, Showa-ike pond, Okayama-shi) and type specimen (f: Y. Iokawa & al. 6032, TUS) of *S. mucronatus* var. *antrorsispinulosus*. Scale bars = 1 mm (a, c) or 0.1 mm (b, d). Vouchers: var. *antrorsispinulosus* (Y. Iokawa & al. 6032 TUS), var. *mucronatus* (Z. Tashiro, 7 X 1917, KYO).

Type: Japan; Okayama Pref., Okayama-shi, Osaki, Showa-ike. Y. Iokawa, K. Kohno & S. Daigobo 6032, 23 Sep. 2002 (TUS).

Japanese name: Inu-hime-kangarei (nov.).

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### 五百川裕<sup>a</sup>, 河野和博<sup>b</sup>, 大悟法滋<sup>c</sup>: 日本産ヒメカンガレイの1新変種

カヤツリグサ科フトイ属のヒメカンガレイ (*Schoenoplectus mucronatus* (L.) Palla) の新変種イヌヒメカンガレイ (var. *antrorisspinulosus* Iokawa, K.Kohno & Daigobo) を記載した。この変種は刺針が上向きであり、下向きの母種から明瞭に区別できる。国内の主要なハーバリウムにおいてフト

イ属の標本を調査したが、これまでのところタイプ産地（岡山市大崎正和池）以外からは見つかっていない。

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